

ABSTRACT OF THE DISCLOSURE

A process for detection of straight-line segments in a stream of digital data that are representative of an image (m, n) in which the contour points of said image each defined by the modulus and the orientation θ of their gradient in relation to a horizontal axis are identified. The stream of digital data is stored in the form of two successive lines, each of n points $P(i, j)$, for each of the lines the n points of said line are extracted successively, and for each point $P_c(i, j)$ extracted, the so-called current point, the three points having inferior coordinates $P_a(i-1, j-1)$, $P_b(i, j-1)$, $P_d(i-1, j)$ directly neighbouring said current point are extracted, successively the value of the orientation of the current point P_c is compared with that of the neighbouring points P_a , P_b and P_d . The values of the orientations of the points P_b and P_d are compared, the result of a comparison is validated if the points are contour points and if the values of their orientation are close. Moreover, when the result of a comparison is validated the coordinates of the point of the connection having inferior coordinates are copied over to those of the point having superior coordinates, it is verified whether solely the point $P_a(i-1, j-1)$ is a contour point amongst the four points P_a , P_b , P_c , P_d extracted, and in the affirmative case the coordinates of the origin point and of the final point and the orientation of the straight-line segment, if its size is greater than a predetermined threshold, are saved.

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